IN THE CLAIMS

1-16. (Cancelled).

17. (Currently Amended) A method for manufacturing a cathode, comprising the steps of:

(A) a step of forming a pair of electrodes on a substrate;

(B) a step of forming a film comprising a polymer so that the film connects the pair of electrodes; and

(C) a step of forming a gap at the film ~~provided between the pair of electrodes~~ and of forming first and second portions including at least one of amorphous carbon and graphite, which are formed by carbonizing the polymer, at a portion of the film ~~facing the gap and in the vicinity of the gap by applying a voltage between the electrodes~~,

wherein the gap, and the first and second portions are formed substantially simultaneously by applying a voltage between the electrodes, and ~~step (B) comprises a step of forming a film comprising a polymer, first and second portions of the film include at least one of amorphous carbon and graphite, and the~~ wherein the first and second portions ~~of the film are adjacent~~ are adjacent to the gap and oppose one another on opposite sides of the gap.

18. (Previously Presented) A method according to Claim 17, wherein the polymer is an all-aromatic polymer.

19. (Previously Presented) A method according to Claim 17, wherein the polymer is any one of polyimide, polybenzoimidazole, polyamideimide, and polyacryllo nitrile.

20. (Previously Presented) A method according to Claim 17, wherein the film comprising the polymer further comprises an electroconductive material.

21. (Previously Presented) A method according to Claim 20, wherein the electroconductive material is graphite.

22. (Previously Presented) A method according to Claim 17, wherein the film comprising the polymer is formed by an ink-jet method.

23. (Currently Amended) A method for manufacturing an electron source comprising a plurality of cathodes, wherein the [[said]] cathodes are manufactured by the method according to Claim 17.

24. (Previously Presented) A method for manufacturing an image forming apparatus having an electron source and a light emitting member, wherein said electron source is manufactured by the method according to Claim 23.